UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 10, 2016

XENON PHARMACEUTICALS INC.

(Exact name of Registrant as Specified in Its Charter)

Canada	**001-36687**	**98-0661854**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

200-3650 Gilmore Way
Burnaby, British Columbia V5G 4W8
Canada
(Address of principal executive offices including zip code)

(604) 484-3300
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On May 10, 2016, Xenon Pharmaceuticals Inc. (the "Company") announced via press release the Company's financial results for the three month period ended March 31, 2016. A copy of the Company's press release is attached hereto as Exhibit 99.1. The information in this Form 8-K and the attached exhibit are furnished to, but not filed with, the Securities and Exchange Commission.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

Pursuant to the rules and regulations of the Securities and Exchange Commission, the attached exhibit is deemed to have been furnished to, but not filed with, the Securities and Exchange Commission:

Exhibit Number	**Description**
99.1	Press Release issued by Xenon Pharmaceuticals Inc. dated May 10, 2016.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 10, 2016 **XENON PHARMACEUTICALS INC.**

By: */s/ Ian Mortimer*
Ian Mortimer
Chief Financial Officer and Chief Operating Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Press Release issued by Xenon Pharmaceuticals Inc. dated May 10, 2016.

EXHIBIT 99.1

XENON

NEWS RELEASE

Xenon Pharmaceuticals Reports First Quarter 2016 Financial Results and Provides Corporate Update

BURNABY, British Columbia, May 10, 2016 -- Xenon Pharmaceuticals Inc. (Nasdaq:XENE), a clinical-stage biopharmaceutical company, today reported its financial results for the quarter ended March 31, 2016 and provided a corporate update.

Dr. Simon Pimstone, Xenon's President and Chief Executive Officer, said, “Since the beginning of the year, we have made solid progress within both our partnered and proprietary programs. We have also added to our senior leadership team with key hires that augment our drug development expertise as we continue to pursue multiple therapeutic opportunities that fit well with our strategic goals and capabilities.”

Dr. Pimstone added, “In February, we initiated a Phase 2 clinical trial of XEN801 that is expected to enroll approximately 150 patients with moderate to severe acne, and we anticipate topline results in the fourth quarter of 2016. Our key partnerships continue to advance – such as our ongoing collaborations with Genentech and Teva to develop novel pain products – providing us with the potential to address large market opportunities. At the same time, we remain focused on developing a proprietary pipeline of novel therapies that address rare or orphan indications, such as severe childhood epilepsy disorders.”

Achievements and Anticipated Milestones

Proprietary Pipeline

- XEN801 is a topical stearoyl Co-A desaturase-1, or SCD1 inhibitor, being developed for the treatment of moderate to severe acne. A Phase 2 clinical trial of XEN801 was initiated in February 2016. The Phase 2 clinical trial is a randomized, double-blind, multi-center, vehicle-controlled, parallel-group study designed to evaluate the efficacy, safety, tolerability and systemic exposure of XEN801 for the treatment of moderate to severe facial acne. Xenon expects to enroll approximately 150 patients with moderate to severe acne, with topline results expected in the fourth quarter of 2016. By targeting a reduction in the size and number of sebaceous glands, thereby reducing sebum production, Xenon believes XEN801 is a promising, novel treatment for acne, which could be better tolerated and without the serious side effects that often limit the use of currently approved retinoid treatments.

- Xenon's development of a Nav1.6 sodium channel inhibitor for the treatment of rare infantile epileptic encephalopathies – such as Dravet Syndrome and SCN8A Epilepsy – continues to progress, and results from early *in vivo* target engagement studies have been encouraging. Xenon expects to identify a development candidate in 2016 and file an investigational new drug (IND) application in the first half of 2017.

- Xenon continues to leverage its drug discovery platform to identify validated drug targets and develop new product candidates, and expects to provide updates as new drug discovery programs advance in 2016.

Partnered Programs

- Xenon's partner Teva Pharmaceutical Industries Ltd. is currently conducting a randomized, double-blind, placebo-controlled Phase 2b clinical trial for TV-45070 in patients with post-herpetic neuralgia, with results expected in the first half of 2017.

- Xenon's partner Genentech, a member of the Roche Group, is currently conducting two Phase 1 clinical trials for GDC-0276 and GDC-0310, which are both oral, selective Nav1.7 small-molecule inhibitors being developed for the potential treatment of pain. Both Phase 1 clinical trials are ongoing, and pending a full assessment of the results, Genentech intends to initiate a Phase 2 clinical trial in 2016. The research term for Xenon’s second collaboration with Genentech, which is centered on pain genetics, was recently extended for another year until March 2017.

- Xenon is eligible to receive a royalty on commercial sales of Glybera, which is licensed to uniQure Biopharma B.V. for the treatment of the orphan disorder lipoprotein lipase deficiency. The first patient treated with Glybera as a commercially-available gene therapy was announced by uniQure in November 2015 and enabled by its commercialization partner in the EU, Chiesi Farmaceutici S.p.A.

First Quarter 2016 Financial Results

Cash and cash equivalents as of March 31, 2016 were $56.1 million, compared to $58.7 million as of December 31, 2015. There were 14,401,582 common shares outstanding as of March 31, 2016.

For the quarter ended March 31, 2016, Xenon reported total revenue of $0.6 million, compared to $4.0 million for the same period in 2015. Revenue in both periods was primarily derived from Xenon's collaboration agreements with Teva and Genentech. The decrease of $3.4 million was primarily attributable to revenue recognized relating to the upfront payment from the collaborative development and license agreement with Teva which was fully recognized by December 2015. The remaining decrease was due to less full time equivalent funding from Genentech and Teva as we shifted resources from supporting our collaborations to our proprietary programs.

Research and development expenses for the quarter ended March 31, 2016 were $4.4 million, compared to $3.4 million for the same period in 2015. The increase of $0.9 million was primarily attributable to an increase in spending on XEN801 which entered Phase 2 clinical development in February 2016 and the Nav1.6 sodium channel inhibitor program, partially offset by decreases in Teva and Genentech collaboration expenses.

General and administrative expenses for the quarter ended March 31, 2016 were $1.9 million, compared to $6.7 million in 2015. In the quarter ended March 31, 2015, a $4.9 million expense was recognized due to the fair value adjustment upon reclassification of stock option awards granted to directors and certain consultants to liability classification; the options were subsequently reclassified back to equity in September 2015. There were no other significant changes in general and administrative expenses.

Other income for the quarter ended March 31, 2016 was $2.4 million, compared to other expenses of $3.0 million for the same period in 2015. The change of $5.4 million was primarily attributable to unrealized foreign exchange gains arising from the translation of Canadian denominated balances to U.S. dollars as compared to unrealized foreign exchange losses for the same period in 2015.

Net loss for the quarter ended March 31, 2016 was $3.3 million, compared to net loss of $9.2 million for the same period in 2015. The change was primarily attributable to unrealized foreign exchange gains and lower general and administrative expenses, partially offset by lower revenues and higher research and development expenses.

Conference Call Information

Xenon will host a conference call and live audio webcast today at 4:30 p.m. Eastern Time (1:30 p.m. Pacific Time) to discuss its first quarter 2016 financial results and to provide a business update. To participate in the call, please dial (855) 779-9075 or (631) 485-4866 for international callers, and provide conference ID number 99339060. The webcast will be broadcast live on the investors section of Xenon's website at www.xenon-pharma.com and will be available for replay following the call for 30 days.

About Xenon Pharmaceuticals Inc.

Xenon is a clinical-stage biopharmaceutical company discovering and developing a pipeline of differentiated therapeutics for orphan indications that it intends to commercialize on its own and for larger market indications that the company intends to partner with global pharmaceutical companies. Xenon has built a core enabling discovery platform, referred to as Extreme Genetics, for the discovery of validated drug targets by studying rare human diseases with extreme traits, including diseases caused by mutations in ion channels, known as channelopathies. Xenon's Extreme Genetics platform has yielded the first approved gene therapy product in the European Union and a broad development pipeline and multiple pharmaceutical partnerships, including with Teva and Genentech. For more information, please visit www.xenon-pharma.com.

Safe Harbor Statement

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995 and Canadian securities laws. These forward-looking statements are not based on historical fact, and include statements regarding our ability to achieve milestones in both our proprietary and partnered development programs, the design of a Phase 2 clinical trial of XEN801 and anticipated enrollment, the anticipated timing of IND submissions with regulatory agencies, the initiation of future clinical trials, the timing of and results from our and our collaborators' ongoing clinical trials and pre-clinical development activities, the plans of our collaboration partners and their interactions with regulatory agencies, the potential efficacy, future development plans and commercial potential of our and our collaborators' product candidates and the progress and potential of ongoing development programs. These forward-looking statements are based on current assumptions that involve risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties, many of which are beyond our control, include, but are not limited to: clinical trials may not demonstrate safety and efficacy of any of our or our collaborators' product candidates; our Extreme Genetics discovery platform or ongoing collaborations may not yield additional product candidates; any of our or our collaborators' product candidates may fail in development, may not receive required regulatory approvals, or may be delayed to a point where they are not commercially viable; we may not achieve additional milestones pursuant to our collaboration agreements; the impact of competition; the impact of expanded product development and clinical activities on operating expenses; adverse conditions in the general domestic and global economic markets; as well as the other risks identified in our filings with the Securities and Exchange Commission and the securities commissions in British Columbia, Alberta and Ontario. These forward-looking statements speak only as of the date hereof and we assume no obligation to update these forward-looking statements, and readers are cautioned not to place undue reliance on such forward-looking statements.

XENON PHARMACEUTICALS INC.
Condensed Balance Sheets
(Expressed in thousands of U.S. dollars)

	March 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 56,064	$ 58,651
Other current assets	2,204	2,215
Other assets	2,884	3,083
Total assets	$ 61,152	$ 63,949
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	2,872	2,625
Deferred revenue	—	157
Non-current liabilities	117	133
Total liabilities	$ 2,989	$ 2,915
Shareholders' equity	$ 58,163	$ 61,034
Total liabilities and shareholders' equity	$ 61,152	$ 63,949

XENON PHARMACEUTICALS INC.
Condensed Statements of Operations
(Expressed in thousands of U.S. dollars except share and per share amounts)

	Three Months Ended March 31,	
	2016	2015
Revenue:		
Collaboration revenue	$ 569	$ 4,010
Royalties	32	—
	601	4,010
Operating expenses:		
Research and development	4,364	3,427
General and administrative	1,895	6,720
	6,259	10,147
Loss from operations	(5,658)	(6,137)
Other income (expense)	2,395	(3,019)
Net loss	$ (3,263)	$ (9,156)
Net loss per common share:		
Basic and diluted	$ (0.23)	$ (0.64)
Weighted-average shares outstanding:		
Basic and diluted	14,394,000	14,212,579

Investor/Media Contact:
Jodi Regts
Senior Director, Corporate Affairs
Xenon Pharmaceuticals Inc.
Phone: 604.484.3353
Email: investors@xenon-pharma.com